CLAIMS

1.   A method for controlling roaming in communication systems comprising:

provisioning a Roaming Enhancement Node (REN) in a mobile's home network;

receiving a Location Updating message from the mobile at a MSC/VLR in a visited network, wherein the Location Updating message includes a Location Area Identity (LAI);

sending the LAI from the MSC/VLR to a HLR in the mobile's home network in an UpdateLocation message;

intercepting the UpdateLocation message at the REN; and

determining whether to continue registration of the mobile based on the LAI at the REN.

2.   The method of claim 1, wherein the REN includes a database that contains a list of restricted location areas for the mobile's home network.

3.   The method of claim 2, wherein the REN determines whether to continue registration by comparing the LAI in the UpdateLocation message to the list of restricted location areas in the database.

4.   The method of claim 2, wherein the REN sends a first rejection response including a rejection cause to the MSC/VLR if the mobile is roaming in one of the restricted location areas for the mobile's home network.

5.   The method of claims 4, wherein the MSC/VLR sends a second rejection response including the rejection cause to the mobile.

6.   The method of claim 2, wherein the REN forwards the UpdateLocation message to the HLR if the mobile is not in one of the restricted location areas for the mobile's home network.

7.   The method of claim 1, wherein the REN is integrated in the HLR.

8.   The method of claim 1, wherein the LAI is included in a "PrivateExtention" field in a Mobile Application Part (MAP) message of the UpdateLocation message.

9.   The method of claim 8, wherein the method further includes analyzing an "ExtensionContainer" field in the MAP message of the UpdateLocation message at the REN.

10.   The method of claim 1, wherein the method further includes sending the UpdateLocation message from the MSC/VLR to the HLR every time the mobile changes location area while the mobile is roaming in a domestic non-home network.

11.   A method for controlling roaming in communication systems comprising:
        provisioning a node adapted to determine whether to allow roaming of a mobile in the mobile's home network;
        receiving a location update request along with a LAI from the mobile at a MSC/VLR in a visited network;
        sending the LAI from the MSC/VLR to a HLR in the mobile's home network in an UpdateLocation message;
        receiving the UpdateLocation message at the node; and
        determining whether to allow roaming of the mobile based on the LAI at the node,
        wherein the node forwards the UpdateLocation message to the HLR if the mobile is allowed to roam, and wherein the node sends a first rejection response to the MSC/VLR if the mobile is not allowed to roam.

12.   The method of claim 11, wherein the node includes a database that contains a list of restricted location areas for the mobile's home network.

13.   The method of claim 12, wherein the node determines whether to allow roaming by comparing the LAI in the UpdateLocation message to the list of restricted location areas in the database.

14.   The method of claim 11, wherein the method further includes sending the UpdateLocation message from the MSC/VLR to the HLR every time the mobile changes location area while the mobile is roaming in a domestic non-home network.

15.   The method of claim 11, wherein the LAI is included in a field in a MAP message of the UpdateLocation message.

16.   The method of claim 11, wherein the REN is integrated in the HLR.

17.   The method of claim 11, wherein the first rejection response includes a rejection cause.

18.   The method of claim 17, wherein the MSC/VLR sends a second rejection response including the rejection cause to the mobile in response to the first rejection response from the node.